

## Claims

What is claimed is:

1. A server system for communicating with a client, comprising:  
a first server for communicating with one or more clients, the first server employing a cache memory containing state information for sessions between the first server and the one or more clients; and  
a second server employing a second cache memory containing the state information.
2. The server system recited in claim 1, wherein the state information is credential information.
3. The server system recited in claim 2, wherein the credential information includes a Secure Sockets Layer session identifier.
4. The server system recited in claim 3, wherein the credential information also includes Secure Sockets Layer session information.
5. The server system recited in claim 3, wherein the credential information also includes authentication information for users of the one or more clients.
6. The server system recited in claim 2, wherein the credential information also includes authentication information for users of the one or more clients.
7. The server system recited in claim 1, wherein the state information is data segment information for controlling the transmission of a data segment between the first server device and the one or more client devices.
8. The server system recited in claim 8, wherein the state information is Transmission Control Protocol/Internet Protocol header information.
9. The server system recited in claim 1, wherein the state information is purchase information.
10. The server system recited in claim 9, wherein the purchase information is items selected for purchase by users of the one or more clients.
11. The server system recited in claim 9, wherein the purchase information is financial transaction information for users of the one or more clients.
12. The server system recited in claim 9, wherein the purchase information is billing addresses of users of the one or more clients.

13. The server system recited in claim 1, wherein the second server can communicate with the one or more clients using the state information.

14. The server system recited in claim 1, further including a third server employing a third cache memory.

15. The server system recited in claim 14, wherein the third server can obtain the state information from the second cache memory employed by the second server, and

communicate with the one or more clients using the obtained state information.

16. The server system recited in claim 1, wherein the state information is stored in the first cache memory and the second cache memory using a hash table.

17. The server system recited in claim 16, wherein the state information is stored in the first cache memory and the second cache memory using the BUZhash algorithm.

18. The server system recited in claim 1, wherein the first server device transmits the state information to the second server device using multicast communication.

19. The server system recited in claim 18, wherein the first server transmits the state information to the second server using negative acknowledgement multicast communication.

20. A server system for communicating with clients, comprising:

a first server for communicating with one or more clients, the first server employing a first cache memory storing a first portion of a cache containing state information for sessions with one or more clients; and

a second server employing a second cache memory with a second portion of the cache containing the state information for sessions with one or more clients.

21. The server system for communicating with clients according to claim 20, wherein at least some of the state information in the first portion of the cache is for at least one session with at least one of the one or more clients, and at least some of the state information stored in the second portion of the cache is the same as the at least some of the state information stored in the first portion of the cache, such that both the first server and the second server can communicate with at least one of the one or more clients using at least some of the state information.

22. The server system for communicating with clients according to claim 21, wherein the first portion of the cache stored in the first cache memory is the same as the second portion of the

cache stored in the second cache memory, such that both the first server device and the second server device can communicate with any of the one or more clients using the state information.

23. The server system for communicating with clients according to claim 20, further including a third server employing a third cache memory storing a third portion of the cache that includes both the first portion of the cache and the second portion of the cache.

24. The server system for communicating with clients according to claim 23, further including a fourth server employing a fourth cache memory storing a fourth portion of the cache that includes the third portion of the cache.

25. The server system for communicating with clients according to claim 20, wherein the state information is stored in the first cache memory and the second cache memory using a hash table.

26. The server system for communicating with clients according to claim 25, wherein the state information is stored in the first cache memory and the second cache memory using the BUZhash algorithm.

27. A method of communicating with a client, comprising:  
conducting a session with a client from a first server;  
obtaining state information corresponding to the session between the first server and the client;  
caching the state information with at least a second server; and  
resuming the session with the client from the second server using the cached state information.

28. The method of communicating with a client according to claim 27, further including:  
caching the state information with a third server, and  
obtaining the state information for caching with the second server from the third server.

29. The method of communicating with a client according to claim 27, wherein the state information is credential information.

30. The method of communicating with a client according to claim 29, wherein the credential information includes a Secure Sockets Layer session identifier.

31. The method of communicating with a client according to claim 30, wherein the credential information also includes Secure Sockets Layer session information.

32. The method of communicating with a client according to claim 30, wherein the credential information also includes authentication information for users of the one or more clients.

33. The method of communicating with a client according to claim 29, wherein the credential information also includes authentication information for users of the one or more clients.

34. The method of communicating with a client according to claim 27, wherein the state information is data segment information for controlling the transmission of a data segment between the first server device and the one or more client devices.

35. The method of communicating with a client according to claim 34, wherein the state information is Transmission Control Protocol/Internet Protocol header information.

36. The method of communicating with a client according to claim 27, wherein the state information is purchase information.

37. The method of communicating with a client according to claim 36, wherein the purchase information is items selected for purchase by users of the one or more clients.

38. The method of communicating with a client according to claim 36, wherein the purchase information is financial transaction information for users of the one or more clients.

39. The method of communicating with a client according to claim 36, wherein the purchase information is billing addresses of users of the one or more clients.

40. The method of communicating with a client according to claim 27, further including caching the state information at a plurality of servers, such that any of the plurality of servers may resume the session with the client using the state information.

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